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Docket No.: 34650-00179USC2
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Karl H. Torbjorn, Gardenfors et al.

Application No.: 10/626025

Group Art Unit: 2635

Filed: July 24, 2003

Examiner: B. A. Zimmerman

For: RADIO TRANSCEIVER ON A CHIP

TRANSMITTAL LETTER

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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Dated: March 7, 2005

Signature:

(Linda Lee Andujar)

Dear Sir:

Enclosed are the following items for filing in connection with the above-referenced Patent Application:

1. Information Disclosure Statement (1 page) and
2. IDS (Citation) by Applicant (42 References) (2 pages).

Please charge our Deposit Account No. 10-0447 in the amount of \$180.00 covering the required fees. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 10-0447, under Order No. 34650-00179USC2. A duplicate copy of this paper is enclosed.

Dated: March 7, 2005

Respectfully submitted

By

Ross T. Robinson

Registration No.: 47,031

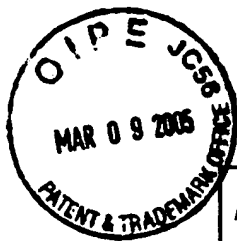
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PTO/SB/17 (12-04v2)
Approved for use through 7/31/2006. OMB 0651-0032
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Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number.

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). FEE TRANSMITTAL For FY 2005		Complete if Known			
		Application Number	10/626025-Conf. #1268		
		Filing Date	July 24, 2003		
		First Named Inventor	Karl H. Torbjorn, Gardenfors		
		Examiner Name	B. A. Zimmerman		
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Art Unit	2635		
TOTAL AMOUNT OF PAYMENT		(\$)	180.00	Attorney Docket No.	34650-00179USC2

METHOD OF PAYMENT (check all that apply)	
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FEE CALCULATION							
1. BASIC FILING, SEARCH, AND EXAMINATION FEES							
Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	
2. EXCESS CLAIM FEES							
Fee Description						Small Entity Fee (\$)	Fee (\$)
Each claim over 20 (including Reissues)						50	25
Each independent claim over 3 (including Reissues)						200	100
Multiple dependent claims						360	180
Total Claims		Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims		
_____		_____	_____	_____	Fee (\$)		Fee Paid (\$)
Indep. Claims		Extra Claims	Fee (\$)	Fee Paid (\$)			
_____		_____	_____	_____			
3. APPLICATION SIZE FEE							
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof		Fee (\$)	Fee Paid (\$)		
_____	_____	_____ /50 _____ (round up to a whole number) x _____		_____	_____		
4. OTHER FEE(S)							
Non-English Specification, \$130 fee (no small entity discount)						Fees Paid (\$)	
Other (e.g., late filing surcharge): 1806 Submission of an Information Disclosure Statement						180.00	

SUBMITTED BY			
Signature		Registration No. (Attorney/Agent)	47,031
Name (Print/Type)	Ross T. Robinson	Telephone	(214) 965-7300
		Date	March 7, 2005

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Dated: March 7, 2005	Signature: (Linda Lee Andujar)



CUSTOMER NO. 23932

Docket No.: 34650-00179USC2
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Application No.: 10/626025

Confirmation No.: 1268

Filed: July 24, 2003

Art Unit: 2635

For: RADIO TRANSCEIVER ON A CHIP

Examiner: B. A. Zimmerman

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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Dated: March 7, 2005

Signature: *Linda Lee Andujar*

(Linda Lee Andujar)

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

A copy of each reference on the PTO/SB/08 is attached.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing

of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Please charge our Deposit Account No. 10-0447 in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 10-0447, under Order No. 34650-00179USC2. A duplicate copy of this paper is enclosed.

Dated: March 7, 2005

Respectfully submitted,

By 

Ross T. Robinson

Registration No.: 47,031

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Attorneys For Applicant



Substitute for form 1449/PTO

(Use as many sheets as necessary)

Sheet	1	of	2
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Complete If Known

Application Number	10/626025-Conf. #1268
Filing Date	July 24, 2003
First Named Inventor	Karl H. Torbjorn, Gardenfors
Art Unit	2635
Examiner Name	B. A. Zimmerman
Attorney Docket Number	34650-00179USC2

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number-Kind Code* (if known)		
	A1	US-2002/0094037	07-18-2002	Darabi et al.
	A2	US-5,937,341	08-10-1999	Suominen
	A3	US-6,427,068	07-30-2002	Suominen
	A4	US-6,631,256	10-07-2003	Suominen
	A5	US-2004/0038655	02-26-2004	Suominen
	A6	US-4,944,025	07-24-1990	Gehring et al.
	A7	US-5,003,621	03-26-1991	Gailus
	A8	US-4,653,117	03-24-1987	Heck
	A9	US-5,222,144	06-22-1993	Whitehart
	A10	US-4,852,123	07-25-1989	Bickley et al.
	A11	US-4,464,770	08-07-1984	Maurer et al.
	A12	US-5,640,698	06-17-1997	Shen et al.
	A13	US-5,850,598	12-15-1998	Behrent
	A14	US-6,226,509	05-01-2001	Mole et al.

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	T ²
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY		
	B1	-JP A 07-254865 .	10-03-1995	Toshiba Corp.	Abstract
	B2	-EP 0 742 647 A1 .	11-13-1996	Matsushita Electric	
	B3	-WO 94/10757 .	05-11-1994	Data-Radio Engineering & Consulting GmbH	
	B4	-WO 97/08842 .	03-06-1997	Pacific Communications Sciences, Inc.	
	B5	-WO 98/08300 .	02-26-1998	Advanced Micro Devices., Inc.	
	B6	-EP 0 797 292 A1	09-24-1997	Philips Electronics N.V.	
	B7	-EP 1 058 396 A1.	12-06-2000	Motorola, Inc.	
	B8	-WO96/17441 .	06-06-1996	Matsushita Electric Industrial Col. Ltd.	Abstract

*EXAMINER: Initial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	HOOMAN DARABI et al., "A 2.4-GHz CMOS Transceiver for Bluetooth", IEEE Journal of Solid-State Circuits, Vol. 36, No. 12, December 2001	
	C2	D.M. BAKKER et al. "Bluetooth End to End", M&T Books, an imprint of Hungry Mind, Hungry Minds, Inc., ISBN: 0-7645-4887-5, 7 pages	
	C3	DAVID BLANKENBECKLER, "An Introduction to Bluetooth" ThinkBurst Media, Inc. www.wirelessdevnet.com/channels/bluetooth/features/bluetooth.html , pp. 1-7	
	C4	ING. ZDENEK MIKESKA, "Parameters of Bluetooth receiver and transmitter", January 2, 2004, Institute of Electrical Engineering and Communication, Brno University of Technology, Czech Republic. pp. 1-9	

**Examiner
Signature**

Date	
Considered	

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete If Known	
				Application Number	10/626025-Conf. #1268
				Filing Date	July 24, 2003
				First Named Inventor	Karl H. Torbjorn, Gardenfors
				Art Unit	2635
				Examiner Name	B. A. Zimmerman
Sheet	2	of	2	Attorney Docket Number	34650-00179USC2

C5	BROADCOM "BCM2002X 2.4GHz Bluetooth Frac-N-Radio" Product Brief	
C6	PIETRO ANDREANI et al. "A CMOS gm-C IF Filter for Bluetooth", in Proceedings of CICC 2000, paper 18-6, May 2000, 4 pages	
C7	JAN CROLS et al., "A Single-Chip 900 MHz CMOS Receiver Front-End with a High Performance Low-IF Topology", IEEE Journal of Solid-State Circuits, Vol. 30, No. 12, December 1995, Katholieke Universiteit Leuven, Heverlee, Belgium	
C8	ASAD A. ABIDI, "Direct-Conversion Radio Transceivers for Digital Communications," IEEE Journal of Solid-State Circuits, Vol. 30, No. 12, December 1995, Katholieke Universiteit Leuven, Heverlee, Belgium, pp. 1390-1411	
C9	M. STEYAERT, "A 1-GHz Single-Chip Quadrature Modulator", IEEE Journal of Solid-State Circuits, Vol. 27, No. 8, August 1992, pps. 1194-1197	
C10	JACK P.F. GLAS, "Digital I/Q Imbalance Compensation in a Low-IF Receiver" IEEE Globecom, pp 1461-1466, Nov. 1998	
C11	VITO BOCCUZZI et al., "Testing the Double Low-IF Receiver Architecture" Proceedings of the CICC, IEEE, 1997, pp. 521-524	
C12	VALKAMA et al., "BSS Based I/Q Imbalance Compensation in Communication Receivers in the Presence of Symbol Timing Errors", Proc. Second Int. Workshop Independent Component Analysis Blind Signal Separation, Helsinki, Finland, June 2000, pp. 393-398.	
C13	J. SEVENHANS et al., "An Analog Radio Front-end Chip Set for a 1.9 GHz Mobile Radio Telephone Application" 1994 IEEE International Solid-State Circuits Conference, February 16, 1994	
C14	J.O. VOORMAN "Continuous-time analog integrated filters" Integrated Continuous-Time Filters, New York IEEE Press, 1993	
C15	JAN CROLS et al., "An Analog Integrated Polyphase Filter for a High Performance Low-IF Receiver", 1995 Symposium on VLSI Circuits Digest of Technical Papers, Katholieke Universiteit Leuven, Heverlee, Belgium	
C16	M.J. GINGELL, "Single Sideband Modulation using Sequence Asymmetric Polyphase Networks" Electrical Communication - Volume 48, Number 1 and 2 - 1973	
C17	STEPHEN A. JANTZI, "A Fourth-Order Bandpass Sigma-Delta Modulator", IEEE Journal of Solid-State Circuits, Vol. 28, No. 3, March 1993	
C18	JAN CROLS et al., "A 1.5 GHz Highly Linear CMOS Downconversion Mixer" IEEE Journal of Solid-State Circuits, Vol 30, No. 7, July 1993	
C19	TRUDY D. STETZLER ET AL., "A 2.7-4.5 V Single Chip GSM Transceiver RF Integrated Circuit, IEEE Journal of Solid-State Circuits, Vol. 30, No. 12, December 1995	
C20	FLOYD M. GARDNER, "Phaselock Techniques, "Phaselock Receivers and Transponders" ISBN: 0-471-04294-3, April 1979	

*EXAMINER: Initial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Examiner Signature		Date Considered	
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